EXERCISE 20-10 (20-25 minutes)

(a) Income Tax Refund Receivable—1996 .................... 5,950
   ($17,000 X 35%)
Income Tax Refund Receivable—1997 .................... 24,000
   ($48,000 X 50%)
Benefit Due to Loss Carryback ........................ 29,950

Note: An acceptable alternative is to record only one Income Tax
Refund Receivable account for the amount of $29,950.

Deferred Tax Asset ................................................... 34,000
   Benefit Due to Loss Carryforward.................... 34,000
   ($150,000 – $17,000 – $48,000 = $85,000)
   ($85,000 X 40% = $34,000)

(b) Operating loss before income taxes  $(150,000)
Income tax benefit
   Benefit due to loss carryback $29,950
   Benefit due to loss carryforward  34,000
Net loss  $ (86,050)

(c) Income Tax Expense................................................. 36,000
   Deferred Tax Asset............................................ 34,000
   Income Tax Payable .......................................... 2,000
   [40% ($90,000 – $85,000)]

(d) Income before income taxes $90,000
Income tax expense
   Current $ 2,000
   Deferred  34,000
Net income $54,000
EXERCISE 20-10 (Continued)

(e) Income Tax Refund Receivable—2000 ....................  12,000
    ($30,000 X 40%)
Income Tax Refund Receivable—2001 ....................  12,000
    ($30,000 X 40%)
    Benefit Due to Loss Carryback  .......................  24,000

Note: An acceptable alternative is to record only one Income Tax
       Refund Receivable account for the amount of $24,000.

(f) Operating loss before income taxes ................................... $(60,000)
    Income tax benefit
        Benefit due to loss carryback  .............  24,000
    Net loss ........................................... $(36,000)
EXERCISE 20-14 (20-25 minutes)

(a) Income Tax Expense..............................................  298,000
Deferred Tax Asset ................................................   30,000
Income Tax Payable ...............................................  328,000

Taxable income $820,000
Enacted tax rate 40%
Income tax payable $328,000

<table>
<thead>
<tr>
<th>Date</th>
<th>Future Taxable (Deductible) Amounts</th>
<th>Tax Rate</th>
<th>Deferred Tax (Asset)</th>
<th>Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/02</td>
<td>$(450,000)</td>
<td>40%</td>
<td>$(180,000)</td>
<td></td>
</tr>
</tbody>
</table>

Deferred tax asset at the end of 2002 $180,000
Deferred tax asset at the beginning of 2002 150,000
Deferred tax benefit for 2002 (increase in deferred tax asset account) (30,000)
Current tax expense for 2002 328,000
Income tax expense for 2002 $298,000
EXERCISE 20-14 (Continued)

(b) The journal entry at the end of 2002 to establish a valuation account:

Income Tax Expense .................................................. 30,000
Allowance to Reduce Deferred Tax Asset to Expected Realizable Value .......... 30,000

Note to instructor: Although not requested by the instructions, the pretax financial income can be solved by completing the following reconciliation:

Pretax financial income for 2002 $ X
Originating difference which will result in future deductible amounts 75,000
Taxable income for 2002 $820,000

Solving for pretax financial income:
X + $75,000 = $820,000
X = $745,000 = Pretax financial income

a $450,000 − $375,000 = $75,000
EXERCISE 20-18 (15-20 minutes)

(a) Pretax financial income for 2001 $300,000
    Depreciation (120,000)
    Warranty expense 80,000
    Taxable income for 2001 $260,000
    Enacted tax rate .35
    Income taxes payable for 2001 $ 91,000

(b) Income Tax Expense................................. 105,500
    Deferred Tax Asset .................................. 31,500*
    Income Tax Payable ................................. 91,000
    Deferred Tax Liability.............................. 46,000**

    *(10,000 X .35) + [($15,000 + $25,000 + $30,000) X .40]
    **($40,000 X .35) + [($35,000 + $25,000 + $20,000) X .40]

(c) Income before income taxes $300,000
    Income tax expense
      Current $91,000
      Deferred 14,500 105,500
      Net income $194,500
(a) \( X(0.40) = $360,000 \) taxes due for 2001
\[
X = \frac{$360,000}{0.40} \\
X = $900,000 \text{ taxable income for 2001}
\]

(b) Taxable income [from part (a)]
\[
\text{Excess depreciation} \quad 100,000 \\
\text{Municipal interest} \quad 10,000 \\
\text{Unearned rent} \quad (40,000)
\]
\[
\text{Pretax financial income for 2001} \quad $970,000
\]

(c) 2001
\[
\begin{align*}
\text{Income Tax Expense} & : \quad 381,000 \\
\text{Deferred Tax Asset ($40,000 \times 0.35)} & : \quad 14,000 \\
& \text{Income Tax Payable} : \quad 360,000 \\
& \text{Deferred Tax Liability ($100,000 \times 0.35)} : \quad 35,000
\end{align*}
\]

2002
\[
\begin{align*}
\text{Income Tax Expense} & : \quad 341,250 \\
\text{Deferred Tax Liability} & : \quad 8,750 \\
& \quad [(\$100,000 \div 4) \times 0.35] \\
& \text{Income Tax Payable} \quad \text{343,000} \\
& \quad (\$980,000 \times 0.35) \\
\text{Deferred Tax Asset} & \quad 7,000 \\
& \quad [(\$40,000 \div 2) \times 0.35]
\end{align*}
\]

(d) Income before income taxes \quad $970,000
Income tax expense
\[
\begin{array}{lrl}
\text{Current} & \quad $360,000 \\
\text{Deferred} & \quad 21,000 & \quad 381,000 \\
\text{Net income} & \quad \$589,000
\end{array}
\]